

# **Department of Energy**

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My 28,2003

Mr. Steve Zappe, Project Leader (WIPP) Hazardous Waste Permits Program Hazardous Waste Bureau New Mexico Environment Department 2905 E. Rodeo Park Dr, Bldg E Santa Fe, New Mexico 87505-6303





Subject: Comment Responses for the Class 2 Permit Modification Request

Dear Mr. Zappe:

The purpose of this letter is to submit comment responses on the Class 2 modification request package submitted to your office on May 21, 2003, which includes the following item:

Revise Polychlorinated Biphenyls (PCB) Prohibition

The comments are the result of pre-submittal meetings in Santa Fe; public meetings held in both Carlsbad and Santa Fe, and written comments from the Environmental Evaluation Group, New Mexico Attorney General's Office, and several additional stakeholders.

If you have any questions regarding this submittal, please contact Mr. Jody Plum at (505) 234-7462.

Sincerely,

Dr. Inés Triay, CBFO Manager

U. S. Department of Energy

Steven D. Warren, General Manager Washington TRU Solutions LLC

Steve Draw

**Enclosure** 

cc: w/enclosure C. Walker, Techlaw CBFO M&RC

cc: w/o enclosure S. Martin, NMED J. Kieling, NMED



### RESPONSE TO PUBLIC COMMENTS

## **Revise PCB Prohibition**

#### Comment 1:

"Our comments are as follows: The proposed modification would change the existing prohibition, which bars waste with PCB concentrations in excess of 50 parts per million, to bar waste "not authorized under an EPA PCB waste disposal authorization.' (e.g., B-2, B-3, B-14). An attachment to the modification is the May 15, 2003 letter from EPA Region VI, authorizing the receipt of certain PCB-contaminated waste. EPA's permission is subject to enumerated "Conditions of Approval."

We submit that any amendment of the existing Hazardous Waste Act permit should refer to specific and known conditions (e.g., the May 15, 2003, EPA letter) and should not incorporate conditions that may be contained in a future EPA authorization. For example, EPA's authorization letter contains limitations on the types of PCB Items (40 CFR sec. 761.3) allowed to be disposed. Further, there are restrictions on the disposal units allowed to receive PCBs, the change in capacity of disposal units, authorized storage areas, change in capacity of storage areas, addition of new storage areas, and the storage and packaging of PCB-contaminated waste. In addition, there are conditions upon the disposal of PCB waste, closure of disposal units, personnel safety, operations, transportation, monitoring, recordkeeping, and other matters. EPA's authorization also has a five-year limit.

In the future EPA may amend these requirements upon Permittees' request. Action taken by EPA on such an application should not automatically modify the Hazardous Waste Act permit issued by the State Environment Department. Indeed, under the regulations applicable to permit modifications, such action by EPA could not effectively modify the State permit. Thus, the modification at present should be limited to permission to receive PCB-contaminated waste allowed by the May 15, 2003 EPA authority."

### Response:

Amendments to the EPA authorization will only impact PCB waste management regulated under the Toxic Substances Control Act (TSCA). Amendments to the TSCA authorization and Conditions of Approval cannot and will not eliminate the "Duty to Comply" with the Waste Isolation Pilot Plant (WIPP) Hazardous Waste Facility Permit (HWFP), as stated in Permit Condition I.E.1. This requirement has been incorporated into the EPA Condition of Approval VI.b, which states that "The owner/operator must comply with all Federal, State, and local regulations, approvals, and permits including the **effective HWFP issued by the NMED**." [Emphasis Added].

In addition, the EPA Conditions of Approval places requirements on the management and disposal of PCB/TRU waste that are not based on the HWFP (e.g., Certificates of Disposal, recordkeeping, contracted transporter requirements). Changes to these conditions will have no bearing on the HWFP (i.e., not require a HWFP modification in order to implement).

Therefore, based on the fact that changes to the Conditions of Approval do not affect compliance with the HWFP and that some of the Conditions of Approval are specific to the authorization, the proposed language in the PMR is appropriate to assure the Permittees' compliance with conditions imposed by both EPA and NMED.

Comment 2:

"PCB wastes are still hazardous wastes even with a TSCA authorization for disposal, and this modification request simply eliminates all references to PCBs from the HWFP. There is no evidence in the PMR that the permittees have evaluated state of New Mexico regulations for considerations that may still apply. The EEG notes that PCBs are mentioned in the NM water quality regulations at least once (at 20.6.2 NMAC) and there may be other such references. These may indicate a need to continue to address PCBs in the HWFP. Prior to approving this PMR, the NMED may want to consider whether the state of New Mexico still has a responsibility to establish PCB controls independent of the TSCA authorization for wastes that are imported into the state."

Response:

This PMR was not intended to simply eliminate all references to PCBs from the HWFP. References in HWFP Module VII prohibiting PCBs for dust suppression and Table F-3 defining emergency response levels were intentionally left in the HWFP. In addition, the prohibitions were modified to prohibit those PCB waste not authorized by EPA. The revised or removed provisions from the permit were intended to allow implementation of the EPA PCB disposal authorization under its TSCA authority by removing specific disposal requirements from the HWFP issued under the Hazardous Waste Act and 20.4 NMAC. The permittees have other programs and/or permits in place under other appropriate laws and regulations to address compliance with other NMED regulations including 20.6.2 NMAC water quality regulations. The HWFP is RCRA and HWA based; it is not an all inclusive, multi-media environmental permit. That is why the other permits are prepared to be compatible with the HWFP.

Comment 3: "As part of the rationale for why the modification is needed, the PMR states that PCB analysis requirements are currently in the HWFP (p. 4):

The associated analytical requirements for PCBs were included in the HWFP to demonstrate compliance with the prohibition on waste containing PCBs equal to or greater than 50 ppm. This assertion is supported by the statement in the HWFP Application, Section C-1b indicating that waste streams known to contain PCBs "are required to be screened to assure PCB levels are below 50 ppm." In addition, footnotes to analytical tables in the HWFP indicate that PCB analysis only applies to those wastes known to contain PCBs. TSCA regulations indicate requirements for analysis for PCBs which the generator sites shall use for determining PCB concentrations.

It seems clear from these statements that the permittees wish to replace the current HWFP PCB analysis requirements with "TSCA regulations" for analysis (presumably those in 40 CFR 761). However, the PMR does not indicate any method for reporting these analysis results to the WIPP, where these PCB-contaminated wastes will be stored and disposed. This information would

obviously be useful during amelioration of any mishaps that might occur to these containers, or to a group of containers.

The EEG suggests that a database on the PCB waste containers be kept at the WIPP facility which indicates the locations of these containers and the PCB concentrations within them be required to be maintained at the WIPP. Since the principal database for waste containers is the WIPP Waste Information System (WWIS) this might be the appropriate database to keep such information—the EEG notes that Section III.D.4 of the EPA Region 6 "Conditions for Approval for Disposal of PCB/TR and PCB/TRU Mixed Waste at the U.S. Department of Energy (DOE) Waste Isolation Pilot Plant (WIPP) Carlsbad, New Mexico" already requires the WWIS to be altered to show information on PCB wastes. NMED may wish to obtain a plan from the permittees for including generator site PCB container location, and PCB concentrations in those containers, in the WWIS, prior to approving of this PMR."

## Response:

First, no requirement exists under the Toxic Substances Control Act, the Resource Conservation and Recovery Act, the Hazardous Waste Act, the HWFP, or the Conditions of Approval that would require the permittees to maintain the "generator site PCB container location".

Second, the Conditions of Approval contain enforceable requirements under EPA's TSCA authority for identifying and reporting information related to PCB/TRU waste, therefore a duplicate set of requirements in the HWFP or an alternate plan is not necessary. These Conditions of Approval require containers and packages to be marked identifying that they contain PCBs (Condition III.D.3), which would be used in the event of any mishaps that might occur to these containers or to a group of containers. Pursuant to Conditions of Approval III.D.4, V.C.1, and VI.I.2, the permittees are also required to maintain records of disposal locations for containers with PCBs. In the "Waste Isolation Pilot Plant Initial Report for PCB Disposal Authorization" requesting authorization, the permittees indicated that these requirements would be met using the WWIS, as the following passage from the initial report states:

WIPP operating records are maintained as defined in Modules I and II of the WIPP HWFP. The records identifying the location of waste containers emplaced are maintained in the WIPP Waste Information System (WWIS) computer database. This database records the location of the emplaced container by panel, room, row, column, and position in the column. Accordingly, this database will provide the three dimensional burial coordinates for PCBs and PCB items as required by 40 CFR § 761.75(b)(8)(iv) and Module IV.H.2 of the HWFP. The database also provides for analytical data, analytical methods used, radioassay data, container shipment information, and other data pertinent to the characterization, transportation, and disposal of PCB/TRU waste.

Comment 4: "Proposed modification a.2 alters Module II.C.3.f. as follows (p. B-2; note that similar language, in a similar position, is used in modification b.1 on p. B-3):

PCB waste concentrations - wastes with polychlorinated biphenyls (PCBs) concentrations equal to or greater than 50 parts per million

not authorized under an EPA PCB waste disposal authorization are not acceptable at WIPP. "

This is in the TSDF WAC, which specifies those wastes that are not to be accepted at the WIPP facility. The EEG believes that, rather than simply referencing "an EPA PCB disposal authorization", the language should be more specific. If the EPA-ORIA, which regulates radionuclide disposal at the WIPP, should write a letter that includes a sentence such as "We have no objection to the disposal of PCB wastes at the WIPP" would that constitute an "EPA PCB waste disposal authorization"?"

Response:

The comment about "EPA-ORIA" is disingenuous; EPA may, of course, only act in accordance with their authority under applicable laws and regulations. The EPA PCB approval can only be made in accordance with formal EPA regulations and policies. See also response to Comment 1.

Comment 5:

"The current EPA Region 6 "Conditions for Approval for Disposal of PCB/TR and PCB/TRU Mixed Waste at the U.S. Department of Energy (DOE) Waste Isolation Pilot Plant (WIPP) Carlsbad, New Mexico" Section II.A.1 states that "PCB contaminated transuranic" wastes are those allowed to be stored and disposed under the authorization. 40 CFR 761.3 defines "PCB-Contaminated" as follows:

*PCB-Contaminated* means a non-liquid material containing PCBs at concentrations >50 ppm but <500 ppm...or where liquid material is unavailable for analysis, a non-porous surface having a surface concentration >10  $\mu$ g/100 cm2 but <100  $\mu$ g/100 cm2, measured by a standard wipe test as defined in § 761.123.

Thus it appears that the original prohibition could most simply be amended by stating:

PCB waste - wastes with polychlorinated biphenyls (PCBs) at concentrations equal to or greater than 500 parts per million, or non-porous surfaces measured using the standard wipe test defined in 40 CFR 761.123 at equal to or greater than 100  $\mu$ g/100 cm2, are not acceptable at the WIPP.

Alternately, the prohibition could reference the exact "EPA PCB waste disposal authorization" that applies to the WIPP.

This same comment would also apply to proposed change b.1, which alters HWFP Section B-1c in a similar manner (p. B-3 of the PMR). Similar language also likely appears in the Section B-6 (QA) checklists."

Response:

The phrase "PCB contaminated transuranic waste" is being confused with the term "PCB-Contaminated" defined in 40 CFR 761.3. The term "PCB-Contaminated" has very specific uses by EPA and includes both a hyphen and a capitalized "C". This is not the term used in the Conditions of Approval.

The Conditions of Approval did not intend to limit the concentration of PCBs for disposal at WIPP to less than 500 ppm. The permittees had requested in the initial report authorization to dispose of TRU wastes containing PCBs in concentrations greater than 50 ppm without an upper bound. The permittees had also indicated the intent to assume the concentrations of PCBs would be greater than 500 ppm in lieu of sampling and analysis. This request was recognized in the EPA letter authorizing the disposal of PCBs at WIPP, when they stated that "EPA hereby approves your request to dispose of TRU and TRU-mixed waste containing PCBs pursuant to Section 761.75 subject to this letter and the enclosed 'Conditions of Approval.'" and in Condition of Approval IV.B.4, which allows PCB/TRU waste shipments that are not sampled to be considered to contain a PCB concentration greater than 500 parts per million (ppm).

The permit language proposed by the Permittees is appropriate, reflects the respective responsibilities of both NMED and EPA, and should be incorporated into the permit.

Comment 6: "On the 'if it ain't broke, don't fix it' theory, what is the rationale for changing the present standard for PCB/ppm? (This is <u>not</u> clear)"

Response: As stated in Section 3 of the PMR, there are no other options available for the management of transuranic wastes containing PCBs. This modification provides an environmentally sound mechanism for the management of TRU wastes containing PCBs, rather than having no management option. This would imply that the system is 'broke' and as suggested by the PMR, WIPP is a technically feasible option to provide a disposal option for transuranic wastes containing PCBs.

Comment 7: "It sounds as if there are contradictions in the EPA regulations regarding PCB et. al. these need to be identified and clarified."

Response: There are differences between the requirements for the management of PCB waste and those for the management of Hazardous Wastes. However, these are "differences" and not "contradictions" as may have been suggested. The permittees have shown that compliance with both standards is possible and required. See also response to Comment 1.

Comment 8: "NMED apparently has the authority - without consequences short of Domenici - to refuse permit modifications and to request changes there in if approved.

Therefore, it seems to me that unlimited PCB allowance in nuclear waste would be unwise, especially because transporters will not know what they are dealing with in case of accidents (which are always foreseeable). Unlimited allowance is another relaxing of safety space and work standards that could lead to unfortunate consequences.

I think, at the least, NMED should insist on a firm PCB/ppm number - a specific amount. My guess is also that unlimited will be abused."

Response: It is true that NMED has authority to process permit modifications in accordance with their rules and regulations. However, it should also be recognized that the

Toxic Substances Control Act (TSCA) is the primary law affecting the safe management and disposal of PCB waste. Regulations under 40 CFR 761 implement the requirements under TSCA. These regulations require the same safety precautions and responses in the event of an accident involving PCBs greater than 49 ppm whether concentration is 50 ppm or 1 million ppm. The permittees have received an authorization under TSCA that recognized that the WIPP facility provides for the safe management and disposal of transuranic waste containing PCBs at any concentration.

## Comment 9:

"WIPP is unable to determine the PCB concentration in incoming debris and/or waste. Being unable to determine incoming PCB concentration, WIPP does not want to conduct sampling and/or analysis for PCBs in runoff from the storage site. An advantage of this approach is that WIPP is removed from possible blame if and/or when human health problems and/or deaths occur down-stream."

## Response:

The permittees are seeking to remove sampling and analytical requirements associated with PCBs as allowed by 40 CFR 761.50(a)(5). However, this does not eliminate the requirement to identify which wastes contain PCBs. The regulations under 40 CFR 761, Subpart G (PCB Spill Clean-up Policy), requires any spill be cleaned up immediately and the surface where the spill occurred must be tested to ensure the adequate cleanup of any residues. This policy also requires that any run-off from a spill be collected and managed in accordance with the disposal requirements in 40 CFR 761. WIPP is committed to the safe management and disposal of waste including those containing PCBs, and should an incident or release occur, WIPP will take appropriate actions in accordance with the requirements and standards set forth in our HWFP and Conditions of Approval.